Claims

1. A method comprising:

detecting an occurrence of a predetermined event within a system;

in response to the predetermined event, changing a power state of a hard drive (HD);

servicing HD data transactions with a non-volatile cache (NVC) of the HD while the HD is spun down.

2. The method of claim 1, wherein the predetermined event includes detecting one of consecutive HD reads that have been satisfied by the NVC for at least a previous predetermined period of time, and a previous predetermined quantity of consecutive HD reads have been satisfied by the NVC.

3. The method of claim 2, wherein the predetermined event further includes determining a predetermined quantity of the NVC would be available to service HD writes when the HD is spun down.

4. The method of claim 3, wherein the changing the power state of the HD includes spinning down the HD.

5. The method of claim 1, wherein the predetermined event includes detecting a predetermined number of HD data transactions serviced by the NVC or the HD.

6. The method of claim 5, wherein the predetermined event further includes detecting a predetermined number of HD data transactions serviced by the NVC or the HD within a previous predetermined period of time.

7. The method of claim 6, wherein the changing the power state includes one of canceling a planned spinning down of the HD and spinning up the HD.

8. A machine readable medium having stored thereon a set of instructions which when executed cause a system to perform a method comprising of:

detecting an occurrence of a predetermined event within a system;

in response to the predetermined event, changing a power state of a hard drive (HD);

servicing HD data transactions with a non-volatile cache (NVC) of the HD while the HD is spun down.

9. The machine readable medium of claim 8, wherein the predetermined event includes detecting one of consecutive HD reads that have been satisfied by the NVC for at least a previous predetermined period of time, and a previous predetermined quantity of consecutive HD reads have been satisfied by the NVC.

10. The machine readable medium of claim 9, wherein the predetermined event further includes determining a predetermined quantity of the NVC would be available to service HD writes when the HD is spun down.

11. The machine readable medium of claim 10, wherein the changing the power state of the HD includes spinning down the HD.

12. The machine readable medium of claim 8, wherein the predetermined event includes detecting a predetermined number of HD data transactions serviced by the NVC or the HD.

13. The machine readable medium of claim of claim 12, wherein the predetermined event further includes detecting a predetermined number of HD data transactions serviced by the NVC or the HD within a previous predetermined period of time.

14. The machine readable medium of claim 13, wherein the changing the power state includes one of canceling a planned spinning down of the HD and spinning up the HD.

15. A system comprising:

a processor;

a non-volatile cache (NVC) coupled to the processor, the NVC to serve as a cache for a hard drive (HD) of the system; and

a machine readable medium having stored thereon a set of instructions which when executed cause the system to perform a method comprising of:

detecting an occurrence of a predetermined event within the system;

in response to the predetermined event, changing a power state of a hard drive (HD);

servicing HD data transactions with the NVC while the HD is spun down.

16. The system of claim 15, wherein the predetermined event includes detecting one of consecutive HD reads that have been satisfied by the NVC for at least a previous predetermined period of time, and a previous predetermined quantity of consecutive HD reads have been satisfied by the NVC.

17. The system of claim 16, wherein the predetermined event further includes determining a predetermined quantity of the NVC would be available to service HD writes when the HD is spun down.

18. The system of claim 17, wherein the changing the power state of the HD includes spinning down the HD.

19. The system of claim 15, wherein the predetermined event includes detecting a predetermined number of HD data transactions serviced by the NVC or the HD.

20. The system of claim 19, wherein the predetermined event further includes detecting a predetermined number of HD data transactions serviced by the NVC or the HD within a previous predetermined period of time.

21. The system of claim 20, wherein the changing the power state includes one of canceling a planned spinning down of the HD and spinning up the HD.